Frequently Asked Questions About Bats and Rabies For Health Care Providers

Why does exposure to bats raise such concern about rabies?

Between 1980 and 2002, 29 (91%) of the 32 cases of domestically acquired human rabies in the United States involved variants of rabies virus associated with bats. Many of these cases had a history of exposure to bats, however, only 3 cases reported an actual bat bite. This finding suggests that even limited contact with bats has the potential of transmission of rabies.

The teeth and claws of bats are so small that a bite or scratch may leave only a very small mark and the wound may not bleed or hurt. Thus, a person may not realize that an exposure has occurred or may not take the exposure seriously enough to feel that it warrants attention, and they may fail to report the exposure.

When should a person exposed to a bat get rabies postexposure prophylaxis (PEP)?

If a bat was physically present and you cannot rule out that a person was bitten, scratched, or had a mucous membrane exposure to the bat (e.g., a sleeping person awakes to find a bat in the room, or an adult witnesses a bat in the room with a previously unattended child, mentally disabled person, or intoxicated person), the Massachusetts Department of Public Health recommends testing the bat for rabies. This is especially important when young children are involved as they may be unable to describe their exposure. If the bat is found to be positive for rabies or the bat is unavailable for testing, postexposure prophylaxis (PEP) should be provided.

What is the appropriate method of PEP for a person exposed to a bat?

If the physician determines that a bat exposure warranting PEP has occurred, the patient should be given one dose of human rabies immune globulin (HRIG) on day 0 and five doses of rabies vaccine on each of days 0, 3, 7, 14, and 28. The HRIG should be given as 20 IU per kg body weight. As much of the HRIG as possible should be infiltrated into and around the wound(s), and the remainder injected intramuscularly at an anatomical site (usually the gluteus muscle) distant from the vaccination site. The deltoid is the preferred site for rabies vaccine administration for adults and older children. For younger children, vaccine may be administered in the outer aspect of the thigh. The rabies vaccine should never be administered in the gluteal area. To ensure complete protection from rabies, the patient must get BOTH the HRIG and the vaccine.*

* The ONLY exceptions to this are: (1) a patient with prior pre- or postexposure prophylaxis given in the United States since 1980 (these patients should be given only 2 doses of vaccine [days 0 and 3] and no HRIG); or (2) a patient who has already begun PEP with vaccine only, for whom no HRIG was given, and who received the first dose of vaccine 7 or more days prior to this evaluation (HRIG given 7 or more days following initiation of vaccination will interfere with the development of active immunity).

Questions about any deviations from the schedule should be directed to the vaccine manufacturer.